

REMARKS

Claims 1-23 are pending. Upon entry of the present amendment, Claims 2-27 will be pending, Claim 1 having been canceled, Claims 2-4, 7, 10, 13, 14, and 17-23 amended, and Claims 24-27 added.

DRAWING OBJECTIONS

The drawings were objected to as containing shaded areas. FIGS. 5, 7-10, 12, 13, 15, 16, and 18 have been amended to remove the objected-to areas. Hence, the objections are overcome.

ALLOWABLE SUBJECT MATTER

Claims 4, 10, 17, 19, and 22 were objected to for being dependent on a rejected base claim, but indicated as allowable if rewritten in independent form. Claims 4, 10, 17, and 22 were so rewritten. Hence, the objections are overcome. Claim 19 has been amended to depend from Claim 16, rather than Claim 17.

102 REJECTIONS

Claims 1-3, 5, and 6 were rejected under 35 U.S.C. 102(e) as being anticipated by Hladik (U.S. Patent No. 6,594,792). Applicants respectfully traverse the rejections.

Claim 2 recites "interleaving 2^n of the at least two bitstreams... and setting aside a remaining of the at least bitstreams." In contrast, Hladik neither teaches nor suggests the setting aside of remaining bitstreams that are not initially interleaved in its interleaver/de-interleaver module. Therefore, Claim 2 and dependent Claim 5 are patentable over Hladik.

Claim 3 recites "creating bitstreams containing zeros, so that the number of the at least two bitstreams is 2^{n+1} ; and interleaving the 2^{n+1} bitstreams." In contrast, Hladik neither teaches nor suggests creating bitstreams containing zeros and interleaving these "zero" bitstreams with "non-zero" bitstreams in its interleaver/de-interleaver module. Therefore, Claim 3 and dependent Claim 6 are patentable over Hladik.

AMENDMENTS TO DRAWING FIGURES:

The attached sheets of drawings include changes to FIGS. 5, 7-10, 12, 13, 15, 16, and 18, to remove shaded areas in the figures. These sheets, which include FIGS. 5, 7-10, 12, 13, and 15-19, replace the original sheets including FIGS. 5, 7-10, 12, 13, and 15-19.

Attachments: Replacement Sheet for FIGS. 5 and 7
Replacement Sheet for FIGS. 8 and 9
Replacement Sheet for FIGS. 10 and 12
Replacement Sheet for FIGS. 13 and 15
Replacement Sheet for FIGS. 16 and 17
Replacement Sheet for FIGS. 18 and 19

103 REJECTIONS

Claims 7-9, 11-16, 18, 20, 21, and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik. Applicants respectfully traverse the rejections.

Claim 7 recites "if the data exceed a predetermined bitrate, iteratively, shuffling consecutive bits in adjacent different bitstreams into a more or less significant bit position." In order for the embodiment of Claim 7 to be obvious in view of Hladik, there must be some suggestion or teaching in Hladik to modify Hladik to produce the claimed embodiment. However, Hladik has no such teaching or suggestion.

The Office Action asserts that it would be obvious to use "the predetermined maximum decoding bit rate in the device of Hladik, for performing an error correction, since a known characteristic of turbo codes is that their error correction capability increase with code word length." See the Office Action, page 6. Even if a predetermined maximum decoding rate is used in Hladik, it does not follow that any error correction performed is an iterative shuffling of consecutive bits in adjacent different bitstreams into more or less significant bit positions.

Therefore, since there is no such suggestion or teaching in Hladik of the claimed embodiment in Claim 7, Claim 7 and dependent claims 8, 9, and 11-13 are patentable over Hladik.

The embodiments of Claims 14 and 21 and their respective dependent claims are also patentable over Hladik for at least the same reasons as discussed above regarding Claim 7.

CONCLUSION

All claims define over the art. Applicants respectfully request allowance of the application.

Respectfully submitted,

Date: October 5, 2004

A handwritten signature in cursive script, appearing to read "Cassandra T. Swain", written over a horizontal line.

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Attachments: Replacement Drawing Sheets (6)